

July 9, 2001

Brian Baird, Ocean Program Manager  
Resources Agency of California  
1416 Ninth Street, Suite 1311  
Sacramento, CA 95814

SUBJECT: Comments on "Draft Policy on Coastal Erosion Planning and Response and Background Material."

Dear Mr. Baird:

I would like to thank you for the opportunity to comment on the Draft Policy of Coastal Erosion. As a licensed civil engineer, primarily practicing coastal engineering, I have a significant appreciation for the amount of effort and thought that went into preparing the document. I would like to offer the following comments and criticisms so that hopefully the final policy will reflect the interests of all coastal stake holders and provide clear direction for coastal planners.

The policy document is about coastal erosion. But what really is the problem? Is it shoreline retreat? Is it shoreline development? Is it watershed development? Or, is it lack of beaches? Simply stated, perhaps the problem is that our land use practices are in conflict with the way we want to use the shoreline. It would seem that this simple description of the problem may account for the differing opinions as to what the problem is. Beach erosion, shoreline development, and watershed development all fall within this simply defined statement of the problem. The draft document focuses on shoreline management to solve the problem (avoidance, relocation, and coastal protection) when a significant cause of the problem is from watershed development (dams, hardscaping, etc.). Without addressing the cause is there any hope in ultimately managing the problem?

Once the problem is defined one can realistically talk about solutions. Solutions need to be holistic in that they consider the entire littoral system. Solutions need to be sustainable both economically and in the stricter definition of sustainability. Solutions come as a result of understanding the problem(s) and having a plan or vision to solving it. The efforts of the Resource Agency to develop a policy for coastal erosion is a good beginning. However, if the policy does not consider the problem holistically and propose sustainable solutions then it will most certainly fail. If the problem is that our land use is in conflict with the way we want to use the shoreline, then to start getting into the solution we need to have a vision as to what sustainable ways we want to use the shoreline. Each section of shoreline is unique and will require its own plan. In an urban setting it is clear that we need to manage all coastal resources. However, in a pristine coastal littoral setting the best thing we can do is not impact the natural setting in any way.

Once there is a vision or plan then the next step is to look at land use practices that impact the shoreline such as, development on the shoreline, flood control structures, urban run off, and hardscaping. The land use practices need to be modified or changed to minimize adverse impacts to the shoreline. Once land use practices are more compatible with the way we want to use the shoreline then the efforts to realize our vision for the shoreline will need less help (\$\$\$) from man. It is important to point out in an urban setting there are few if any natural systems. If we want to realize our vision in an urban area for the shoreline we will need to create as natural a system as possible and then most likely we will need to help nature through action such as beach nourishment or coastal protection. The key to the finding solutions is first to define the problem, create a vision or plan that is holistic and sustainable and then take action to realize the vision.

I would like to suggest that persons who want to better understand the complexities of coastal erosion on both a spacial and temporal scale read "Coastal Erosion-Underlying Factor and Human Impacts" by Paul Komar (Shore & Beach Vol 68, No1. January 2000). This article is in the Journal of the American Shore and Beach Preservation Association and is written by a world wide expert on coastal processes. The essence of the article is that the problem is very complex but that "we are morally obliged to restore the beach by replacing the lost sand." The draft of the proposed policy has beach building as a third priority when it should be the first priority. Dr. Reinhard Flick from Scripps Institution wrote another very informative article in the July 1993 Shore & Beach about "The Myth and Reality of Southern California Beaches." This article clearly points out that many of Southern California famous beaches were man made. It is clear that if we want beaches then we need to build them.

Studies by SANDAG (San Diego Association of Governments) clearly show that Californians want beaches. The first two priorities of the proposed policy, hazard avoidance and relocation, will do little to make beaches. Relocation in many cases is unsustainable. Where do you move the railroad in San Clemente? Where do you move Pacific Coast Highway in Cardiff, Crystal Cove or Malibu? Do we just let our shoreline State Park Campgrounds fall into the ocean? When the homes along the shoreline fall into ocean do we then protect the public roads? These two management strategies make little sense when the shoreline is already developed and there is no place to move. We will have to stop shoreline erosion somewhere, particularly before it reaches our vital civil works (freeways, roads, pipelines, railroads, etc.)

I would like to offer the following general comments.

1. The document prepared by state agency personnel does not reflect the interests of all coastal stake holders. Certainly private property owner interests are not represented nor are other corporate coastal stake holders such as the railroad. The group of technical participants is more of a clique of sycophants that may reflect only one side of the multifaceted coastal erosion issue.
2. The document perpetuates the misinformation about how coastal protection structures interact with the beach. This misinformation is perpetuated by one State

agency in particular over and over again in an effort to put forward an unauthorized agenda of shoreline retreat. I would like to refer interested parties to another Shore & Beach ( January 1992) article by Robert Wiegel entitled "Some Complexities of Coastal Waves, Currents, Sand and Structures." Dr. Wiegel has the highest credentials as a coastal engineer and is sought world wide for his professional opinions on coastal issues. He states, " Much misinformation is spoken and written about how revetments and seawalls interact with beaches, the statement is often made that they "cause beach erosion". There is little scientific evidence for this statement. The statement is unproven at best, wrong at worst. Few people build them unless their property is already subject to erosion. Then the structure is blamed for the additional erosion which occurs in an already eroding location". In addition, recent scientific studies have shown that California seawalls have little if any impact on the beach. It is curious that the draft policy perpetuates misinformation on coastal structures impacts and ignores valid scientific studies that are contrary to one state agency's unauthorized agenda.

3. The policy is open to interpretation, particularly as to when and how one should relocate or protect. The vagueness of the policy will place an onerous burden of justification on the coastal property holder and give the regulatory agencies undue discretionary power. As an example the California Coastal Commissions requires that justification of the need for a new shoreline protection device is required prior to issuance of a permit. For the last decade I have repeatedly asked commission staff what is the criteria for justification, what is their measure of the need. I have always received the same unspecific verbal response. I am licensed by the State of California to determine the need but I am consistently over ruled by commission staff because this criteria is open to their interpretation. The Commission yields undue power in the vagueness of the criteria. Any vagueness in the erosion policy will have similar problems.

I would like to close with some additional quotes from Dr. Wiegel's paper. "Complex things tend to become simplified in the minds of many people, adults as well as children. Too often, also, simplifications are used to make a point in meetings and in the press, and then used in development and establishing policies and standards which has some time led to flawed policies and inadequate standards....the National Committee on Coastal Erosion Zone Management of the National Research Council in their 1990 report *Managing Coastal Erosion*, state:

'...a single uniform answer to erosion problems is neither practical not desirable...'

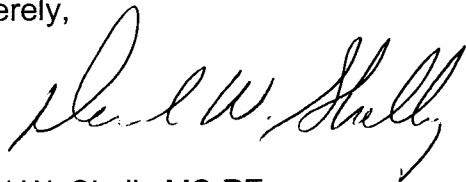
and

'...public planners and decision makers should avoid basing policies on stereotypes or preconceptions as to 'typical' shorelines and their state of development and governance.'

Dr Wiegel's paper also points out that "in order for reliable policies to be established and good decisions to be made, a better understanding is required of the complexities of near shore oceanic conditions and coastal processes."

The draft policy as it now stands doesn't not reflect the interests of all coastal stake holder. It only attempts to treat the symptoms of shoreline erosion. It does not put forth sustainable solutions. Finally, it does not place beach restoration as a high enough priority. I would be more than happy to participate in the further development of the policy and would also be happy to discuss this further with your or other interested parties.

Sincerely,

A handwritten signature in black ink, appearing to read "David W. Skelly". The signature is fluid and cursive, with the first name "David" being the most prominent part.

David W. Skelly MS,PE